Legislative Services Division Systems Analysis Project

Key Findings and Recommendations

Introduction

The Montana (MT) Legislature's technology infrastructure is aging and at risk. Some of the core systems are nearing obsolescence. Others are operationally stable, but are based on designs that are at least 10 years old (and some much older). Action is needed soon to avoid significant problems.

This document describes projects that will provide significant improvements and remediate several pressing risks. These projects are described in a list of major and minor recommended improvements (attached). This document describes the 8 major projects that deliver the most benefit or address known risks.

How this Plan was Developed

Process Analysis: This plan is the result of an extensive review of existing processes and systems in use throughout the Montana Legislature.

Several process analysis sessions were conducted with key stakeholders from various areas to document the existing process and find opportunities for process improvement. The resulting process descriptions and diagrams were reviewed and edited extensively for accuracy. They will be the basis for future proposed process design activity and system development planning.

Systems Analysis: All systems and platforms in use in the legislature to support these processes were evaluated for suitability to the process, age of the tools, advantages and limitations of the tools, and cost of using them.

Key systems that need replacing include the TextDBMS system on the mainframe, and the use of WordPerfect & Perfect Script for document preparation. These are aging systems that may not be supported in the near future and where better tools exist today. Several support tools (e.g., queries, OmniMark, etc.) need upgrading as well, to work with new repository databases and technology. Unification of the Oracle databases within LAWS Status system and web servers used for Public access could provide financial savings as well from hosting cost reductions.

Key systems that work well or are current and need not be replaced include the AV Streaming and the Vote systems. The Oracle-based LAWS Status system will benefit from some reconfiguration and minor enhancements.

The projects described below address all the major recommendations from both the process and systems evaluations efforts. They have been identified as high priority projects due to risks of aging systems and opportunities with new tools and approaches to text processing.

Proposed Project Schedule

To complete all of the work described in these projects will require 3 to 4 calendar years. Timing of

project activity must be coordinated with legislative activity and resource availability. In order to complete this development in time for use in the 2015 session, it is imperative that work begin as soon as possible, or these systems may not be ready until the next biennium's window of opportunity (see chart below).   If no work occurs on these projects in 2011, the current systems will not be entirely replaced until the 2017 session or later – this creates significant obsolescence and cost risk.

The projects are described as stand-alone efforts, but have some dependencies between them. These descriptions represent a program of activity and deliverables that may occur over the next 3 to 4 years. Some of these projects can be done earlier to familiarize staff with the technology, explore and prototype approaches, and to build the beginnings of the entire platform that will ultimately be developed with the completion of the TextDBMS Replacement / XML (Extensible Markup Language) Database project.

Below is a timeline for the 8 major projects recommended as part of the MT Session Systems Analysis Project. The chart shows a possible schedule for each and some relationships and dependencies between these projects. The solid line indicates a dependency.
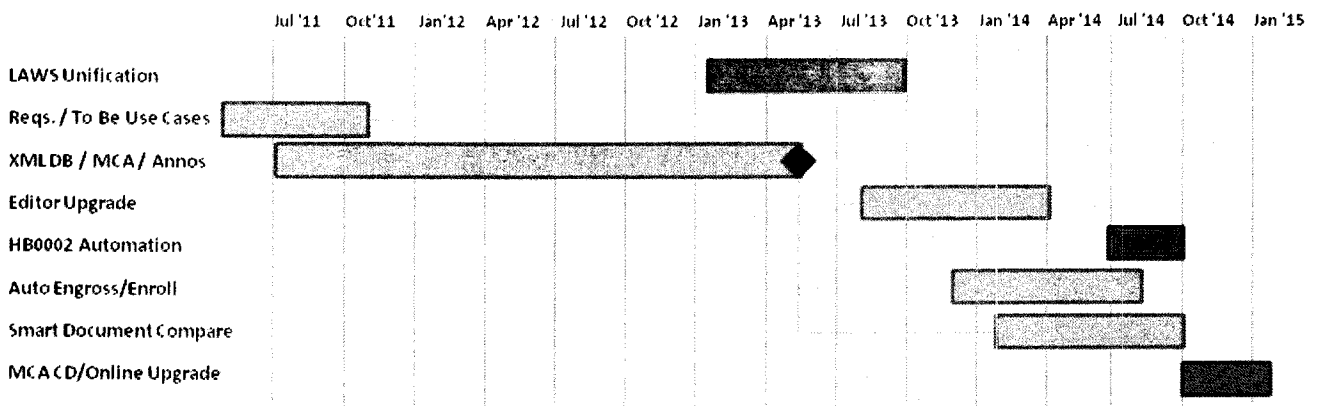
Project	PM	Analyst	DBA	Coder	Tester	FTE Mos	Est. $
Reqs. / Process design	1.75	14.00	-	-	-	15.75	$ 393,750
XML Repository / MCA / Annos	12.50	36.50	12.00	72.00	20.50	153.50	$ 3,837,500
Laws Database Unification	1.75	3.00	3.50	8.00	2.00	18.25	$ 456,250
Editor Upgrade	1.50	4.00	-	6.00	1.00	12.50	$ 312,500
HB2 Automation	1.00	2.00	-	2.00	1.50	6.50	$ 162,500
Auto Engrossing / Enrolling	1.50	3.00	-	6.00	3.00	13.50	$ 337,500
Smart Document Compare	1.50	3.00	-	6.00	3.00	13.50	$ 337,500
MCA Online/CD-ROM Upgrade	0.50	1.00	-	3.00	1.00	5.50	$ 137,500
Total	20.25	52.50	15.50	103.00	32.00	239.00	$ 5,975,000

Mo / Yr	12
FTE Yrs	19.92
FTE / Yr	300000
Net	$ 5,975,000
FTE Mo$	$ 25,000

LEGISLATIVE FISCAL DIVISION SYSTEMS ANALYSIS

FINDINGS AND RECOMMENDATIONS

BACKGROUND:

The LFD Process and System Documentation and Analysis project was undertaken to document LFD's major and minor business processes and the technologies and applications used to support these processes. In order to document LFD systems and processes and provide better support for LFD, the Legislative Branch asked for, and received, a Systems Analysis FTE from the 2009 Legislature. This FTE was filled and the incumbent has begun the analysis phase of this project. The result of the project will be a series of recommendations on new software products to use where existing ones are obsolete or not robust enough and lay out a schedule for replacement of these systems with resources and budget needed to accomplish the replacement.

OBJECTIVE:

This project prepares the groundwork for future modifications, enhancements or replacements of LFD systems. By documenting the current processes and systems environment, opportunities for improvement can be identified and prioritized. Additionally, gathering current documentation helps reduce risks and improve support capabilities through knowledge transfer to additional LFD and IT resources.

OUTCOMES:

The project was designed to create three sets of documents.

1. Documentation of current business processes – 14 business processes were reviewed and are currently being documented.
2. Documentation of current systems – 12 technical systems were reviewed and are currently being documented.
3. Report of findings and recommendations – This document contains the current findings and recommendations from this project.

SUMMARY RECOMMENDATIONS:

Below is a summary of the projects recommended as part of the LFD Process and System Documentation and Analysis project.

The following projects should be launched in the next biennium.

Project	Estimate
Revise Processes and Applications for Major Publications (study)	$135,000
MBARS Upgrade/Replacement (continued planning only)	$0
Move Systems to Centralized IT Support	* $0
Total Current Biennium Estimated Funding	**$135,000**

The following potential projects should be considered in future biennium. Funding may be requested in the future to support these projects.

Project	Estimate
Revise Processes and Applications for Major Publications (implementation)	TBD
MBARS Upgrade/Replacement (possible implementation)	TBD
Lotus Approach Replacement	$250,000
Fiscal Note System Replacement	$300,000
MS Access Database Replacement	$50,000
Improve "Transparency" of Revenue and Expenditure Data (Study)	$0

* Any costs will come from IT operations putting further pressure on LSD's central IT budget.